

Final Agenda: 2019 AFRC Industrial Combustion Symposium
Hilton Waikoloa Village, Hawaii
September 9 - 11, 2019

Date	Session	Time-Slot	Paper Title	Author(s)	Session Chair	
9/8/19		6:00 PM - 8:00 PM	Welcome Reception/Registration			
9/9/19		7:00 AM - 8:00 AM	Continental Breakfast			
		7:00 AM - 3:30 PM	Registration		Philip Smith & Jamal Jamaluddin	
		8:00 AM - 8:30 AM	Opening Remarks			
	1A	8:30 AM - 9:00 AM	Regulatory and Analyzer Update for USEPA's New Formaldehyde Emission Limit for Combustion Turbines	Troy M. Boley		Kurt Kraus
		9:00 AM - 9:30 AM	Advanced Emissions Monitoring from Elevated Gas Flares for Early Warning System and Optimization of Plant Operations	Joseph D. Smith, Ph.D., Robert E. Jackson and Zachary P. Smith		
		9:30 AM - 10:00 AM	Closed Loop Flare Control Using a Video Imaging Spectral Radiometer	Yousheng Zeng, Jon Morris, Brian Duck, Scot Smith		
			10:00 AM - 10:30 AM	Morning Break		
	1B	10:30 AM - 11:00 AM	Hardening of Arches for Commercial Simulation of Industrial Flares	Marc A. Cremer, Matthew McGurn, Adam Cowley, Minmin Zhou, Jeremy Thornock, Michal Hradisky, Scott Evans, Daniel Pearson	Brian Duck	
		11:00 AM - 11:30 AM	Lessons Learned from Transient Analysis of Combustion Equipment in the Process Industries	Joseph D. Smith, Ph.D., Robert Jackson, and Ahti Suo-Antilla, Ph.D.		
		11:30 AM - 12:00 PM	Data Informed Multipoint Ground Flare Evaluation Using Measurement and Theory	J. Thornock, M. Hradisky, M. Zhou, M. Cremer		
			12:00 PM - 1:00 PM	Lunch		
			1:00 PM - 1:30 PM	Multistage Flameless Oxidation	J.G. Wunning	

	1C	1:30 PM - 2:00 PM	Numerical and Experimental Investigations on an Innovative, Regeneratively Heated Radiant Tube with Compact Dimensions	Linda Geisler, Nico Schmitz, Christian Schwotzer, et al	Will Fraase
		2:00 PM - 2:30 PM	Recommendations for Pilot Design in Incinerator Applications	Adam Bader	
		2:30 PM - 3:00 PM	Afternoon Break		
	1D	3:00 PM - 3:30 PM	EC Sensor: Flame Safety and Fuel Savings Integrated into One System	Steve Sock, Jim Deller, Donald Kendrick	Joseph Smith
		3:30 PM - 4:00 PM	Duplex: Lessons Learned and Roadblocks Overcome to its Success	Steve Sock, Jim Deller, Donald Kendrick	
		4:00 PM - 5:30 PM	AFRC Business Meeting		
9/10/19		7:30 AM - 8:30 AM	Continental Breakfast		
		7:30 AM - 4:30 PM	Registration		
	2A	8:30 AM - 9:00 AM	Experimental Investigations for the Development of Burners for Low Scale Reheating of Semi-finished Metal Products	Christian Schwotzer, Nico Schmitz, Herbert Pfeifer	Chuck Baukal
		9:00 AM - 9:30 AM	Computational Study of the Anode Baking Industrial Furnace	Prajakta Nakate	
		9:30 AM - 10:00 AM	Numerical Investigations of Tailored Heating of a Round Bar for Partial Hot Forming using Direct Flame Impingement (DFI)	Stephanie Thie, Christian Schwotzer, Herbert Pfeifer	
		10:00 AM - 10:30 AM	Morning Break		
	2B	10:30 AM - 11:00 AM	Neutron Imaging of Heterogeneous Solid Fuels under Heating	C.E.A. Finney	Charles Finney
		11:00 AM - 11:30 AM	PERF Project 2014-10 Results and Analysis of the VISR Method for Remote Flare Monitoring	Brian Duck	
		11:30 AM - 12:00 PM	Predicting Ash Deposition During Pulverized Coal Combustion	Gautham Krishnamoorthy	
		12:00 PM - 1:00 PM	Lunch		

	2C	1:00 PM - 1:30 PM	An Air-Assisted Flare for Biomass Gasifiers	Hayder A. Alhameedi, Aso A. Hassan, Joseph D. Smith*	Ian Fischer	
		1:30 PM - 2:00 PM	Callidus nViro Forth Generation (4G) Steam Flare Technologies	Richard Martin, Chris Ferguson, Kurt Kraus		
		2:00 PM - 2:30 PM	Remote Measurement of Flare Gas Flow Rate using a Video Imaging Spectral Radiometer	Yousheng Zeng, Jon Morris, Chris Foster		
	2D	2:30 PM - 3:00 PM	Afternoon Break			
		3:00 PM - 3:30 PM	Developments in Low Nox Incineration Technologies	Minwoo Kwon, Jeremy Massey, Adam Bader and Nate Petersen	Walter Gull	
		3:30 PM - 4:00 PM	Simplified Analysis and Practical Mitigation Techniques for Industrial Boiler Thermoacoustic Vibration	Matt Whelan		
6:00 PM - 9:00 PM		AFRC Symposium Banquet				
9/11/19		8:00 AM - 9:00 AM	Continental Breakfast			
	3A	9:00 AM - 9:30 AM	Flare Regulatory Update	Herman Holm	Chuck Benson	
		9:30 AM - 10:00 AM	A Smart Combustion Approach to Quantify and Evaluate Leakage Air Effects in Fired Heaters	Charles (Chuck) Baukal and Jose Corcega		
		10:00 AM - 10:30 AM	Morning Break			
		10:30 AM - 12:00 PM	Open Discussion: The Future of AFRC		Philip Smith and Philip Sharman	
		12:00 PM - 1:00 PM	Lunch			